

NAME \_\_\_\_\_

## Drawing Lewis Structures 1

Use the rules provided and a PENCIL to complete this table. Remember to record the valence electrons for each atom and the total electrons in the table. After you are satisfied with your structure, draw it in the table so you can refer back to it later.

Molecule	Valence Electrons per Atom	Total Electrons (Valence)	Lewis Structure
H <sub>2</sub> O	H: 1	8	<pre>       :O:      / \     H   H           </pre>
	O: 6		
CCl <sub>4</sub>	C: 7	32	<pre>       :Cl:         :Cl-C-Cl:               :Cl:           </pre>
	Cl: 4		
H <sub>2</sub>	H: 1	2	H-H
NH <sub>3</sub>	N: 5	8	<pre>       :N:      / \     H   H               H           </pre>
	H: 1		
OF <sub>2</sub>	O: 6	20	<pre>       :O:      / \     :F  :F:           </pre>
	F: 7		
SiCl <sub>4</sub>	Si: 4	32	<pre>       :Cl:         :Cl-Si-Cl:               :Cl:           </pre>
	Cl: 7		
CH <sub>3</sub> Cl	C: 4	14	<pre>       H             H-C-Cl:               H           </pre>
	H: 1		
	Cl: 7		
NF <sub>3</sub>	N: 5	26	<pre>       :N:      / \     :F  :F:               F           </pre>
	F: 7		
H <sub>2</sub> S	H: 1	8	<pre>       :S:      / \     H   H           </pre>
	S: 6		
CO <sub>2</sub>	C: 4	16	<pre>   :O=C=O:           </pre>
	O: 6		

NAME \_\_\_\_\_

## Drawing Lewis Structures 2

Use the rules provided to complete this table. Remember to record the valence electrons for each atom and the total electrons in the table. Be sure to check to determine if multiple bonds or resonance structures are necessary.

Molecule	Valence Electrons per Atom	Total Electrons	Lewis Structure
O <sub>2</sub>	O: 6	12	$\text{:O}=\text{O:}$
NI <sub>3</sub>	N: 5 I: 7	26	$\text{:I}-\ddot{\text{N}}-\text{I:}$
H <sub>3</sub> C <sub>2</sub> O <sub>5</sub> <sup>-</sup> +1	H: 1 C: 4 O: 6	24	$\left[ \text{H}-\underset{\text{H}}{\underset{ }{\text{C}}}=\text{O}=\ddot{\text{O}}-\text{H} \right]^{-}$
CH <sub>3</sub> Cl	C: 4 H: 1 Cl: 7	14	$\begin{array}{c} \text{H} \\   \\ \text{H}-\text{C}-\ddot{\text{Cl}}: \\   \\ \text{H} \end{array}$
BrO <sub>3</sub> <sup>-</sup>	Br: 7 O: 6	26	$\left[ \text{:}\ddot{\text{O}}-\ddot{\text{Br}}-\ddot{\text{O}}\text{:} \right]^{-}$
O <sub>3</sub>	O:		$\text{:}\ddot{\text{O}}=\ddot{\text{O}}-\ddot{\text{O}}\text{:} \text{ or } \text{:}\ddot{\text{O}}-\ddot{\text{O}}=\ddot{\text{O}}\text{:}$
SO <sub>3</sub>	S: 6 O: 6	24	$\begin{array}{c} \text{:}\ddot{\text{O}}=\text{S}-\ddot{\text{O}}\text{:} \\ \text{:}\ddot{\text{O}}\text{:} \end{array} \quad \begin{array}{c} \text{:}\ddot{\text{O}}\text{:} \\ \text{S}=\ddot{\text{O}}\text{:} \\ \text{:}\ddot{\text{O}}\text{:} \end{array}$

